

1. The disclosure is objected to because of the following informalities:

on page 7, line 29, the term "upto" appears to be misspelled.

2. Claims 3 and 4 are objected to because of the following informalities:

in claim 3, line 4, the term "resp." appears to be misspelled; and

in claim 4, line 5, the term "resp." appears to be misspelled.

Appropriate correction is required.

3. Claims 3, 4 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the first resp." in line 4;

claim 4 recites the limitation "the first resp." in line 4; and

claim 15 recites the limitation "the processor" in line 1.

There is insufficient antecedent basis for these limitations in the claims.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US20030052821 in combination with US6243322. The US20030052821 reference discloses the utilization of a position estimation system (64, 62, 65) for estimating a position of an object (64), comprising: an acoustic emitter (64) arranged to emit an acoustic pulse (63); an acoustic receiver (62) arranged to detect an acoustic signal (63) based on the pulse; and a processor (65) for processing the acoustic signal to obtain the position, characterized in that one of the emitter (64) and the receiver (62) is attached to the object (M); and the processor comprises evaluation

means arranged to estimate the position of the object (M) on the basis of the ultrasound signal (63) in a first time interval, the first time interval comprising ultrasound energy of at least a first reflection (67) of the pulse on a reflecting object (60) as recited in the claims. The difference between the US20030052821 reference and claim 1 and 11-14 is that the claim recites the utilization of a room. The US6243322 reference teaches that it was well known in the art to utilize an acoustic positioning device in a room (see FIG. 2). It would have been obvious to use the US20030052821 reference in a room as motivated by the US6243322 reference to enable the US20030052821 system to locate objects in a room in a predictable manner.

With regards to claims 2-5, the US20030052821 and US6243322 references disclose the utilization of processors which inherently have some sort of memory. The US20030052821 reference discloses determining a set of potential locations (see paragraph 0044) and look-up tables. The US6243322 references disclose determining if the source is near or far from a microphone based on a stored threshold determined from the ratio of the direct and reflected signals (see column 3, lines 1-52) . The US6243322 references also discloses the utilization of windowing or buffering the receivers output (see column 3, line 62). The US6243322 references also discloses the utilization of empirical experience or training (see column 4, lines 43-50) .

With regards to claim 11, the US20030052821 reference discloses the utilization of tags.

With regards to claim 15, the references discloses the utilization of computers which would inherently have programs.

7. Claims 6-10 are rejected under 35 U.S.C. 103 as being unpatentable over US20030052821 in combination with US6243322 as applied to claims 1 and 2 above, and further in combination with US6141293. Claims additionally recites the utilization of a plurality or transmitters and receivers to determine the orientation of a target. The US6141293 reference

teaches that it was well known in the art to utilize a plurality of transmitters and receivers to determine the orientation and a position of a target (see column 1, lines 36-42). It would have been obvious to modify the previous combination of references to utilize a plurality of transmitters and receivers as motivated by the US6141293 reference to enable the system to determine the orientation of a target in a predictable manner .

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pihulic whose telephone number is 571-272-6977. The examiner can normally be reached on Tuesday through Thursday and every other Monday and Friday from 5:30 a.m. to 4 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza, can be reached on 571-272-6979.

The fax phone numbers for the organization where this application or proceeding is assigned are:

571-273-8300 for official responses, and

571-273-6977 for unofficial communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the telephone number 800-786-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

**/DAN PIHULIC/
Primary Examiner, Art Unit 3662**